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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte FRANCK BARILLOUD, XIAOPING CHEN, and
CHRISTOPHER MICHAEL MORRISSEY

Appeal 2011-004192
Application 09/714,724
Technology Center 2400

Before JONI Y. CHANG, GLENN J. PERRY, and RAMA G. ELLURU,
Administrative Patent Judges.

ELLURU, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from a final rejection of all pending claims, 3-12 and 37-41. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

The Invention

The invention relates to a method, a system, an apparatus, or a computer program product for balancing demand for networked services in a distributed data processing system wherein: (1) each client is uniquely associated with a local service manager; (2) each local service manager provides access to a networked services for associated clients; (3) each local service manager is uniquely associated with a distributed service manager; and (4) each distributed service manager provides access to networked services for associated local service managers. (Spec. 4, ll. 4-17). In operation, (1) a client sends a request for a networked service to its local service manager; (2) the local service manager returns information about a matching service to the client; and (3) if the local service manager does not have information about a matching service, then the request is forwarded to its associated distributed service manager. (*Id.* at 17-24).

Claim 3 is reproduced below:

3. A method of balancing demand for networked services in a distributed data processing system, the method comprising the steps of:
initializing one or more local service managers within the distributed data processing system, wherein each local service manager has information about and provides access to networked services defined within a respective local region of the distributed data processing system for clients within the distributed data processing

system, and wherein each client is uniquely associated with a local service manager;

initializing one or more distributed service managers within the distributed data processing system, wherein each distributed service manager provides access to the networked services to the local service managers within the distributed data processing system, and wherein each local service manager is uniquely associated with a distributed service manager;

receiving, at a distributed service manager, a request for a networked service from a local service manager for which the local service manager lacks information;

determining whether the distributed service manager has information about a networked service with one or more characteristics that match one or more parameters in the request for a networked service, wherein the determining step is accomplished by reference to a cache maintained by the distributed service manager which contains information resulting from prior requests for networked services; and

returning information for referencing a matched networked service.

Prior Art

The Examiner relies upon the following references:

| | | |
|----------|-----------------|---------------|
| Derby | US 5,426,637 | Jun. 20, 1995 |
| Fowlow | US 5,920,868 | Jul. 6, 1999 |
| Elnozahy | US 6,014,686 | Jan. 11, 2000 |
| Jindal | US 6,324,580 B1 | Nov. 27, 2001 |
| Chandra | US 6,457,047 B1 | Sep. 24, 2002 |

Rejections on Appeal

1. Claim 3 is rejected under 35 U.S.C. § 102(b) as anticipated by Derby. (Ans. 3-4).

2. Claims 3-7 and 38-40 are rejected under 35 U.S.C. § 103(a) as obvious over Elnozahy and Chandra. (Ans. 5-9).

3. Claims 8-12 and 41 are rejected under 35 U.S.C. § 103(a) as obvious over Elnozahy, Chandra, and Jindal. (Ans. 9-10).

4. Claim 37 is rejected under 35 U.S.C. § 103(a) as obvious over Elnozahy, Chandra, and Fowlow. (Ans. 10-11).

ANALYSIS

Anticipation Rejection: Claim 3

Appellants argue that Derby does not disclose “wherein each client is uniquely associated with a local service manager,” as recited in claim 3. (App. Br. 11; Reply Br. 3).

The Examiner finds that Derby’s LAN access agent teaches the claimed “local service manager” and is associated with multiple services. (Ans. 12-13). In addition, the LAN access agent knows which services are located on the local configuration, which is a “unique association with a local service manager.” (*Id.* at 13). The Examiner further maintains that the claim does not state that only one service can be associated with only one local service manager or that only one local service manager can be associated with only one service. (*Id.*). However, the claim requires that “each *client*,” not service, is uniquely associated with a local service manager.

Appellants also argue that Derby does not disclose “receiving, at a distributed service manager, a request for a networked service from a local service manager for which the local service manager lacks information,” as recited in claim 3. (App. Br. 12).

The Examiner finds that Derby's LAN protocol agent initiates searches for resources which are not available locally, and reciprocally, the directory services unit 22 invokes the protocol components 18 in order to search the local LANs for the location of a particular destination LAN station. (Ans. 14). The Examiner further explains that the agents look for information about service in their local cache and if that information is not present in the local cache, they search adjoining access agents to locate the service information. (*Id.* at 14). However, the Examiner has not shown the claimed "*receiving, at a distributed service manager, a request for a networked service,*" and only refers to searches performed by the LAN protocol agent and the directory services unit.

Appellants further argue that Derby does not disclose "determining whether the distributed service manager has information about a networked service with one or more characteristics that match one or more parameters in the request for a networked service, wherein the determining step is accomplished by reference to a cache maintained by the distributed service manager which contains information resulting from prior requests for networked services." (App. Br. 13). In response, the Examiner again refers to searches performed by the LAN protocol agent and the directory services unit for the location of a particular destination LAN station, which location information the Examiner finds is the same as the claimed "information about a networked service." (Ans. 14). The Examiner also indicates that the results of such searches may then be cached by the WAN access agents.

While the Examiner has shown that Derby's directory services unit¹ performs searches for "information about a networked service" and that the search results can be cached, there is no disclosure of the claimed "determining whether the distributed services manager has information about a networked service," and "wherein the determining step is accomplished by reference to a cache maintained by the distributed services manager."

In sum, we find, as discussed above, that the rejection of claim 3 as being anticipated by Derby is not supported by a preponderance of evidence.

Obviousness Rejections: Claims 3-7 and 38-40

Appellants further argue that the Elnozahy does not teach both the claimed "local service manager" (one or more) and the separate "distributed service manager" (one or more), "wherein each distributed service manager provides access to the networked services to the local service managers." (App. Br. 15). The Examiner finds that Elnozahy's Cell Directory Service ("CDS") (Elnozahy col. 1, l. 49) teaches the claimed "local service manager" (Ans. 5 (citing Elnozahy col. 1, ll. 41-59; col. 5, ll. 20-37)) and Elnozahy's CDS server teaches the claimed "distributed service manager" (*Id.* (citing Elnozahy col. 5, ll. 20-37)). Additionally, the Examiner finds that Elnozahy's Master CDS teaches the claimed "local service manager" and Elnozahy's Replica CDS machine, which the Examiner contends is "effectively a mirror," teaches the claimed "distributed service manager." (Ans. 16).

¹ According to Appellants, the Examiner finds that Derby's directory services unit discloses the claimed "distributed services manager." (App. Br. 13).

Appellants maintain that the Cell Directory Service and the CDS server are the same component because the CDS server is used to provide the Cell Directory Service, and thus, the Examiner is impermissibly double counting the CDS server as both the “local service manager” and the “distributed service manager.” (App. Br. 15-16 (citing Elnozahy col. 5, l. 23 (“The highly available **CDS** in accordance with the principles of the present invention **consist of two main components: standard CDS servers** 62 and 72 and high-availability agents 68 and 76”))).

Appellants argue that claim 3, for example, requires two separate initialization steps, “initializing one or more local service managers” and “initializing one or more distributed service managers,” but Elnozahy does not describe two separate initialization steps for each of its CDS server and CDS as they are the same component. (App. Br. 16). We agree. Indeed, the Examiner cites the same Elnozahy disclosure (col. 5, ll. 20-37) for both initialization limitations (Ans. 5).

Appellants also argue that Elnozahy does not teach the claimed “wherein **each distributed service manager provides access to the networked service to the local service managers** within the distributed data processing system, and wherein each local service manager is uniquely associated with a distributed service manager,” as recited in claim 3. (App. Br. 16). The Examiner responds that Elnozahy teaches that the CDS server, which the Examiner equates with the “distributed services manager,” distributes the information for the networked services to the local service managers. (Ans. 15-16). The Examiner also finds that Elnozahy teaches that the master agent 68 forwards an update request to the replica server, which the Examiner also equates with the “distributed services manager,”

and once the master agent 68 determines that the update request has been handled by each of the replica servers 72 master agent 68 forwards the reply to back to the client. (Ans. 16-17). The Examiner, however, does not explain how Elnozahy teaches that the CDS server or the Replica CDS machine, both of which the Examiner finds teaches the claimed “distributed service manager provides *access to the networked services to the local service managers*” as claimed. (Reply Br. 4).

Appellants also argue that Elnozahy does not teach the claimed “receiving, **at a distributed service manager**, a request for a networked service **from a local service manager** *for which the local service manager lacks information*,” as recited in claim 3. Specifically, Appellants contend that Elnozahy’s second alleged server is a *redundant* server that performs the *same* function as the primary server, and thus, there would be no reason to request information from such a redundant server that the primary server *lacks*. (App. Br. 17). With respect to the CDS server, which the Examiner equates with the “distributed service manager,” Appellants argue that the Examiner has failed to show receiving, at the CDS server, a request for a network service from the CDS for which the CDS lacks information. (*Id.*) According to Appellants, because the CDS sever provides the functionality of the CDS service, the CDS service would never initiate a request to its own CDS server for information that it lacks because if it lacks the information, so would the CDS server. (*Id.*) With respect to the replica CDS machine, which the Examiner also equates with the “distributed service manager,” Appellants argue the Examiner finds that the replica CDS machine is “effectively a mirror” (Ans. 16) of the master CDS, but Elnozahy does not describe that the master CDS lacks information that results in the replica

server receiving a request for a network service from such master CDS service². (Reply Br. 4-5). The Examiner responds that master agent 68 forwards a client request to master CDS server 62 and if the request requires an update of the name space the master agent 68 also forwards the request to the replica server. (Ans. 18). According to the Examiner, if the request is forwarded to the replica server, then it is received by the replica server. (*Id.*) The Examiner, however, has not shown how Elnozahy teaches that the replica server (i.e., the “distributed service manager”) receives a “request for a networked service from” the master CDS (i.e., the “local service manager”), for which the master CDS “*lacks information.*”

In sum, we find, as discussed above, that the rejection of claim 3 as being obvious over the combination of Elnozahy and Chandra is not supported by a preponderance of evidence. Appellants assert the same arguments made with respect to claim 3 against other claims on appeal, all of which are rejected based combinations that include Elnozahy, (App. Br. 15, 18, 20, 23, 24, 25, 26, and 28). Thus, also for the reasons discussed above, we find that the rejections of claims 4-12 and 37-41 are not supported by a preponderance of evidence.

Additional Arguments

Because we have reached the merits of the issues discussed above, we do not address any remaining arguments raised by Appellants.

² Appellants mistakenly state that the Examiner equates Elnozahy’s replica server as the claimed “local service manager” (Reply Br. 5), as opposed to the master CDS. (Ans. 16). However, Appellants’ argument is still applicable because the Examiner finds that one is “effectively a mirror” of the other. (*Id.*)

DECISION

The rejection of claim 3 under 35 U.S.C. § 102(b) is
REVERSED.

The rejection of claims 3-12 and 37-41 under 35 U.S.C. §103(a) is
REVERSED.

REVERSED

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